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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/764,800	01/26/2004	Marcus F. Fontoura	SVL920030118US1	9771

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EXAMINER
ALI, MOHAMMAD

ART UNIT	PAPER NUMBER
2166	

DATE MAILED: 12/14/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>29 September 2006</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-30</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-30</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All   b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application (PTO-152)

6)☐ Other: _____.

DETAILED ACTION

1.   This communication is in response to the amendment filed on 9/2/06.

Response to Arguments

2.   After further search and a thorough examination of the present application claims 1-30 remain rejected.

Applicants' arguments with respect to claims 1-30 have been considered, but they are not deemed to be persuasive.

First, In response to applicant's arguments Call teaches 'determining whether a data field associated with the token is a fixed width' as the 16-bit word size for term numbers used to tokenize terms was selected for several reasons. For machine processing efficiency, the integer size should be chosen as an even multiple of the 8-bit size used in conventional byte addressable RAM. A 16-bit integer (word) permits up to 65,536 different terms to be specified in a string table, which has been found to be a vocabulary of adequate size to store all of the unique terms used in a large text database which, when convertet to tokenized form, can be stored in the available RAM space. Although a 32 bit integer size could also be rapidly processed, since most modem computers employ an ALU register size and memory bus widths of 32 bits or larger, the 16 bit integer size yields a data structure half a slarge, and the 16 bit size permits a termcount that is more than adequate for even large text databases (see para. 0103, Call).

Second, In response to applicant's arguments Call teaches 'when the data field is a fixed width, designating the token as one for which fixed width sort is to be

performed' as stated above and store variable length character data in an addressable array of integer values organized to permit more efficient execution of processing functions of the type typically performed by data processors (see para. 0010, Call); to represent natural language text in more compact form as an array of fixed length binary integers which are more rapidly searched, sorted and processed (see para. 0026, Call).

Third, In response to applicant's arguments Call teaches 'when the data field is a variable length, designating the token as one for which a variable width sort is to be performed' as stated above and a contiguous sequence of integers in the integer array are selected for highlighting by the user by manipulating the mouse to select a block of text such as the text block within the dashed-line. After the textblock is selected, the user is given the option of highlighting that block. If the highlight option is chosen, the view under the "Marked Text" tab is automatically displayed. The selection of a block of text on the "Read" tab screen selects a sequence of integers in the integer array, and these integers are converted into a corresponding natural language text by the method show_block method in the form1 object which calls the astext method of the termstore object (in the textwork.pas unit) to convert the designated block of integers into text which is displayed in the Highlighed Passage window (see para. 0123, Call)

Hence, Applicants' arguments do not distinguish over the claimed invention over the prior art of record.

In light of the foregoing arguments, the 102 rejections are hereby sustained.

Claim Rejections - 35 USC § 102

3.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

4.   Claims 1-30 are rejected under 35 U.S.C. 102(a) as being anticipated by Charles

G. Call ('Call' hereinafter), USPgPub 2002/0165707.

        With respect to claim 1,

        Call teaches a method for indexing data (para. 0069), comprising:

        receiving a token (see para. 0042, Call);

        determining whether a data field associated with the token is a fixed width (see

para. 0103, Call);

        when the data field is a fixed width (see para. 0103, Call), designating the token

as one for which fixed width sort is to be performed (see para. 0069, Call); and

        when the data field is a variable length (see para. 0010, Call), designating the

token as one for which a variable width sort is to be performed (see para. 0103, Call).

        As to claim 2,

        Call teaches wherein the token is variable width and further comprising:

transforming the variable width token into a fixed width token (see paras. 0076, 0130,

Call).

As to claim 3,

Call teaches performing a fixed width sort on one of dual code paths and a variable width sort on the other of dual code paths (see paras. 0038, 0039, Call).

As to claim 4,

Call teaches generating a sort key that includes a token type, a token, a document identifier, a document section, and an offset in a document (see para. 0103 et seq., Call).

As to claim 5,

Call teaches receiving different sections of a document at different times (see para. 0013, Call).

As to claim 6,

Call teaches wherein the different sections include a context section and an anchor text section (see para. 0025, Call).

As to claim 7,

Call teaches generating sort keys for each token of multiple tokens (see para. 0069, Call); and

using the sort keys to create posting lists that simultaneously are ordered by token and by document identifier for each token (see para. 0060, Call).

As to claim 8,

Call teaches using the sort keys to bring together multiple sections of a document (see para. 0013, Call).

As to claim 9,

Call teaches sorting on certain bits of a sort key containing multiple bits (see para. 0104, Call).

As to claim 10,

Call teaches sorting on uppermost bits of the sort key (see para. 0103, Call).

Claims 11-30 have the same subject matter as of claims 1-10 and essentially rejected for the same reasons as discussed above.

Remarks

5.   Applicant's reminded that claims 11-20 required software in order realize in the real world value in the hardware. A processor or memory is required.

Conclusion

6.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

7.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Mohammad Ali whose telephone number is (571) 272-

4105. The examiner can normally be reached on Monday-Thursday (7:30 am-6:00 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Hosain T. Alam can be reached on (571) 272-3978. The fax phone number

for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

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For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a

USPTO Customer Service Representative or access to the automated information

system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Mohammad Ali
Primary Examiner
Art Unit 2166

MA
December 9, 2006